



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,450	03/19/2004	Raymond Oakley	135/03	5401

7590 10/08/2004
Averill & Varn
8244 Painter Ave.
Whittier, CA 90602

EXAMINER

COTTINGHAM, JOHN R

ART UNIT	PAPER NUMBER
----------	--------------

2116

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,450

Applicant(s)

OAKLEY, RAYMOND

Examiner

John R. Cottingham

Art Unit

3679



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 14-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/19/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 19 is objected to because of the following informalities: the term "national pipe taper" renders the claim indefinite because it is unclear as to what the standard is, and the standard can change over time. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by MacCormack U.S. Patent 3,008,741. MacCormack shows all of the claimed subject matter of a releasable tubing connector in figures 1-7.

Regarding claim 1, a releasable tubing connector comprising: a corner piece 9; and at least one arm 8a attached to said corner piece at a proximal end of the arm, and extending away from said corner piece 9, and having a distal end opposite the proximal end, said arm having: a central axis extending through the center of the arm and away from said corner piece; a slice 10 extending to the distal end of said arm and separating the distal end of said arm 8a into a first finger portion and a second finger portion; and a taper threaded hole 12 centered on the slice, wherein; the arm is slideably engagable into an end of a length of tubing; and a screw 14 may be advanced into the taper

Art Unit: 3679

threaded hole 12 (tapered on at the top of the upper thread) to spread the first finger portion of the arm from the second finger portion of the arm.

Regarding claim 2, wherein the taper threaded hole 12 is a pipe threaded hole.

Regarding claim 3, wherein the screw is a taper threaded screw.(end is has a smaller diameter giving it a tapered shape.)

Regarding claim 4, wherein the screw is an allen screw.

Regarding claim 5, wherein the screw is a tamper resistant screw.

Regarding claim 6, wherein said tubing has an access hole, wherein when the tubing is positioned on the arm of the tubing connector, the access hole is substantially aligned with the taper threaded hole of the arm.

Regarding claim 7, the tubing is square tubing and the arm has a substantially square cross-section slideably engagable into an end of said square tubing.

Regarding claim 8, wherein the difference between a tubing inside dimension and an arm outside dimension is between approximately 0.015 inches and approximately 0.025 inches.

Regarding claim 9, a difference between a tubing inside dimension and an arm outside dimension is approximately 0.020 inches.

Regarding claim 10, at least one arm comprises at least two arms 8c.

Regarding claim 11, wherein at least one arm is between approximately 1.5inches and approximately 2.5 inches long.

Regarding claim 12, at least one arm is approximately two inches long.

Art Unit: 3679

Regarding claim 13, the at least one arm 8c is between approximately 0.8 inches and approximately one inches across.

Regarding claim 16, the at least one arm has a substantially square cross section having beveled edges. (ends)

Regarding claim 17, the at least one arm has faces including relief's 11.

Regarding claim 18, a structure comprising: a multiplicity of tubing connectors comprising: a corner piece 9; and at least one arm attached to said corner piece at a proximal end of the arm, and extending away from said corner piece, and having a distal end opposite the proximal end, said arm having a central axis, and comprising: a slice 10 extending to the distal end of the arm 8c and separating the distal end of said arm into a first finger portion and a second finger portion; and a taper threaded hole 12 (tapered at the first thread) approximately centered on the slice and approximately orthogonal to the central axis, tubular members 5 connected by the tubing connectors, wherein the tubular members have tubing ends residing on said arms and having access holes 13 aligned with the taper threaded holes; screw 14 residing in the taper threaded hole and spreading the first finger portion of the arm from the second finger portion of the arm to hold the tubing securely on the arm.

Regarding claim 19, the taper threaded hole is a national pip taper thread hole, and the screw is an NPT threaded screw.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over

MacCormack. MacCormack does not show the claimed method of assembly.

However, given that the structure of MacCormack meets the claimed structure of an assembled tubular structure, it would have been within the level of ordinary skill in the art to use the same assembly to assemble the invention of MacCormack.

Allowable Subject Matter

5. Claims 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. MacMillan U.S. Patent 3,620,558 and Offenbroich U.S. Patent 3,580,620 show similar inventions.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703)

Art Unit: 3679

306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John R. Cottingham
Primary Examiner
Art Unit 3679

jrc